

# NASA Earth System Science at 20

A satellite image from MODIS showing a large fire in a mountainous region of California. The fire is visible as a large, irregular white and grey area in the center-left of the image. The surrounding landscape is a mix of green forest and brown, dry vegetation. A white arrow points from the text 'I was there' to the fire area.

I was there

Inez Fung  
UC Berkeley

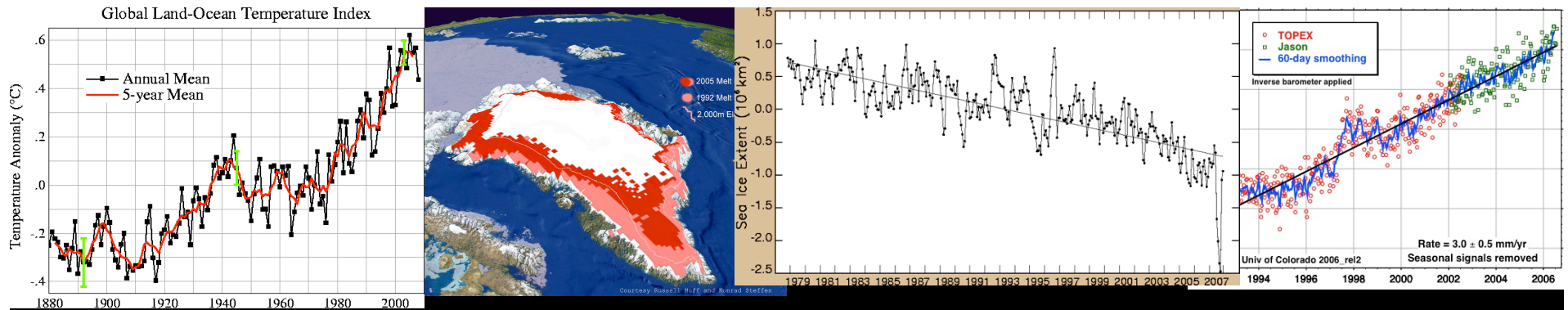
MODIS Rapid Response June 23 2009



# EOS Interdisciplinary Science Teams

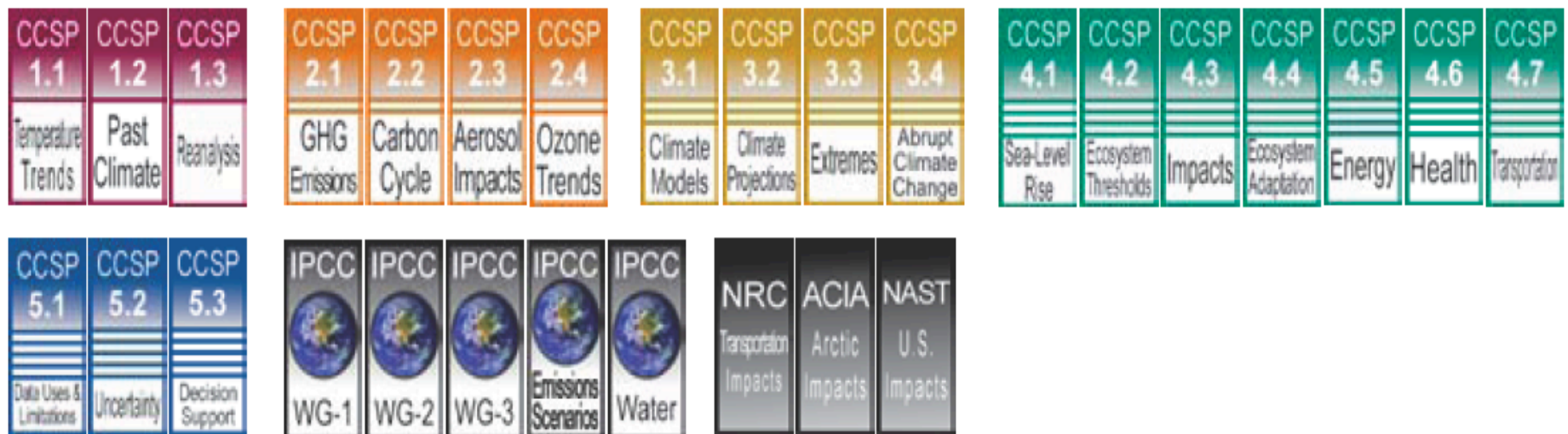
A photograph of the International Space Station (ISS) in orbit above Earth. The station's long, white, cylindrical truss structure extends diagonally across the frame. Two astronauts in white space suits are visible working on a module at the end of the truss. The Earth's blue and white cloud-covered surface is visible on the left, while the blackness of space is on the right.

--> the “now” generation of Earth System scientists



# Planet Earth has more than a fever...

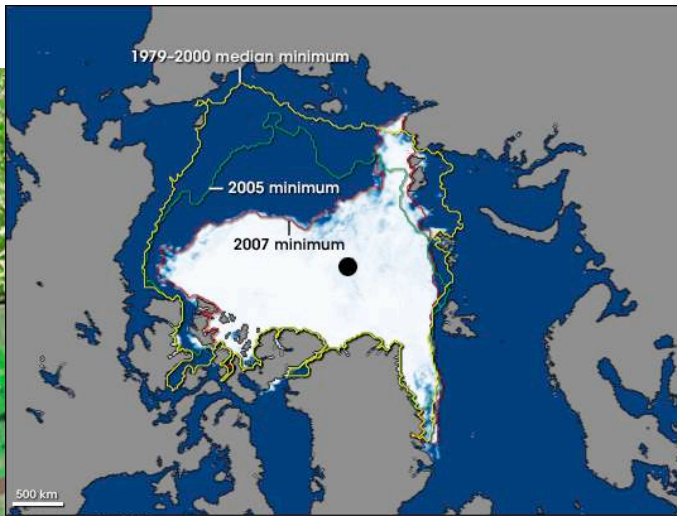
## Outlook is not very rosy



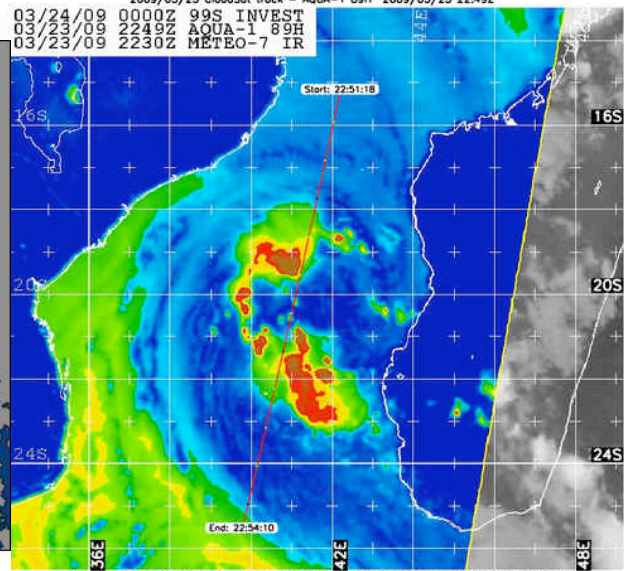
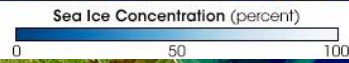
# Earth System Science for the next 20 years - critical for informing climate choices:

- Annual Check-up of Planet Earth
- Emergency/Fast Response Diagnostics
- Data assimilation system to synthesize and make sense of *all* data
- Next generation of climate models

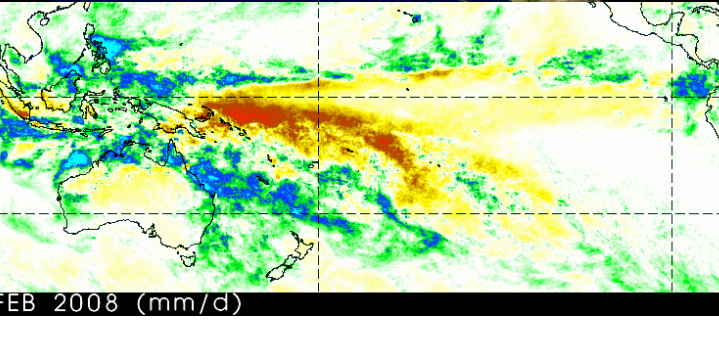
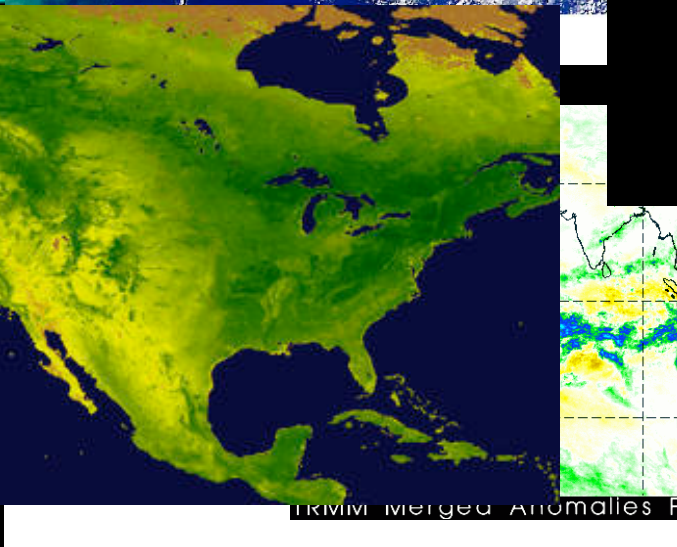
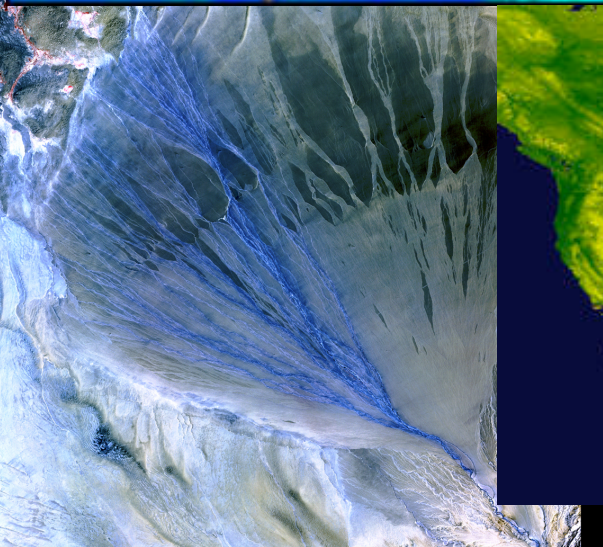
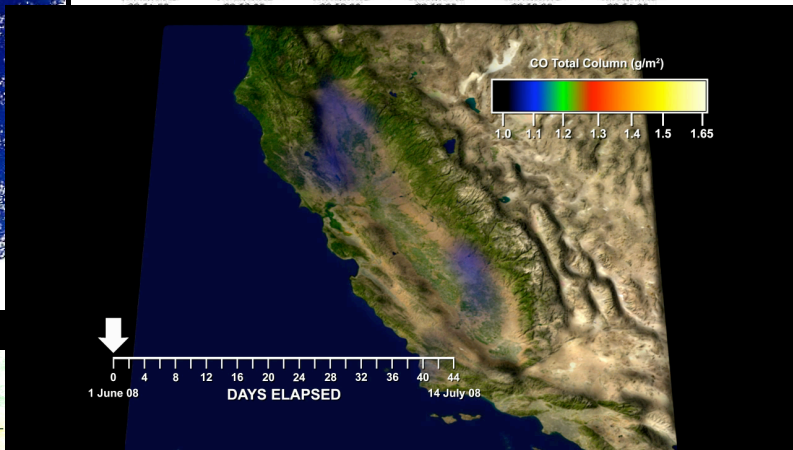
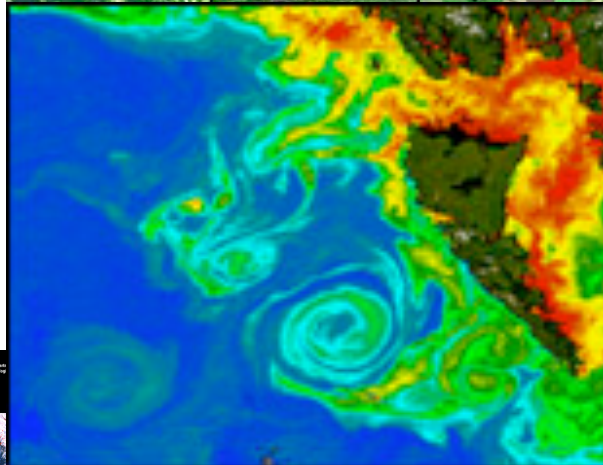
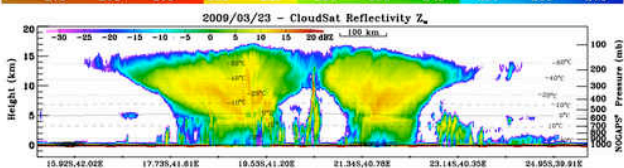




September 16, 2007



Naval Research Lab [www.nrlmry.navy.mil/sat\\_products.html](http://www.nrlmry.navy.mil/sat_products.html)  
 89H Brightness Temp (Kelvin)



TRMM merged Anomalies FEB 2008 (mm/d)



